

Appl. No. 09/625,663
Amd. Dated October 4, 2005
Reply to Office Action of August 23, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original): An apparatus for maintaining a data circuit in the event that one or more devices within the data circuit become inoperable, the apparatus comprising:
a plurality of interface cards for transmitting and receiving data streams;
a cross-connect unit for routing the data streams received from a first set of said plurality of interface cards to a second set of said plurality of interface cards, said cross-connect unit routing each data stream based on an associated matrix, wherein the associated matrix identifies the interface cards that will receive the data stream and an order that the interface cards will receive the data stream;

a control unit for controlling the operation of the apparatus; and
a backplane forming connections between the cross-connect unit and each of the plurality of interface cards.

Claim 2 (original): The apparatus of claim 1, wherein the associated matrix includes a source point and a destination point for each section of the data circuit, wherein a section is defined as a transmission of the data stream from one interface card to another interface card, the source point corresponds to a transmitting interface card and the destination point corresponds to a receiving interface card.

Claim 3 (original): The apparatus of claim 2, wherein the associated matrix further includes a next drop point for each destination point so that said cross-connect unit can route the data stream to the next drop point if the receiving interface card associated with the destination point is inoperable.

Claim 4 (original): The apparatus of claim 3, wherein in the event that consecutive interface cards are inoperable said cross-connect unit can continually utilize the next drop point in the associated matrix to determine the next interface card to receive the data stream.